

A585 Windy Harbour to Skippool Improvement Scheme

TR010035

6.7 Environmental Statement Chapter 7: Cultural Heritage

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**A585 Windy Harbour to Skippool
Improvement Scheme**
Development Consent Order 201[]

ENVIRONMENTAL STATEMENT CHAPTER 7: CULTURAL HERITAGE

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Author:	A585 Windy Harbour to Skippool Improvement Scheme Project Team, Highways England

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7 CULTURAL HERITAGE

7.1 Introduction

7.1.1 This Chapter presents the assessment of the potential impacts on archaeology and cultural heritage of the Scheme. It also presents the regulatory framework, assessment methodology, study area, existing and future baseline, mitigation measures, residual effects, monitoring and a summary.

7.1.2 This Chapter should be read in conjunction with Figure 7.1 – General Location and Study Area, Figure 7.2 – Designated Heritage Receptors, Figure 7.3 - Non-Designated Heritage Receptors, Figure 7.4 - Heritage Receptors Identified Through Lidar, Historic Mapping, Aerial Photography and Walkover Survey and Appendix 7.1: A585 Windy Harbour to Skippool Improvement Scheme Cultural Heritage Desk-Based Assessment (DBA) (document reference TR010035/APP/6.7.1) as well as Appendix 7.2: Archaeological Geophysical Survey (document reference TR010035/APP/6.7.2) and Appendix 7.3: Geoarchaeological Assessment (document reference TR010035/APP/6.7.3).

7.2 Regulatory Framework / National Networks National Policy Statement (NN NPS) Requirements

7.2.1 This assessment has been undertaken considering current legislation, together with national, regional and local plans and policies. A list of plans is provided within Table 7-1 and further detail can be found in the Planning Statement and National Policy Statement Accordance (document reference TR010035/APP/7.1).

Table 7-1: Cultural Heritage - Regulatory Framework and NN NPS Requirements

Policy / Legislation
NN NPS (2014) Chapter 3, paragraphs 3.1 and 3.5
Planning (Listed Buildings and Conservation Areas) Act 1990
National Planning Policy Framework (NPPF) (2018)
Adopted Fylde Borough Local Plan (2005)
Adopted Wyre Local Plan (1999)
Fylde Local Plan to 2032 (emerging document – due to be adopted 2018)
Wyre Local Plan to 2031 (emerging document – due to be adopted 2018)

7.3 Methodology

Items Scoped in and out of the Assessment

7.3.1 Through the baseline assessment of heritage receptors, outlined in the DBA (Appendix 7.1 (document reference TR010035/6.7.1), numerous heritage receptors have been scoped out of the Environmental Impact Assessment (EIA), as it has been deemed that they would experience no impact from the Scheme. The primary method for scoping out heritage receptors from the assessment of the ES, is through establishing the extent of the setting of individual heritage receptors. Following this,

using professional judgement and guidance, receptors whose setting were deemed to not extend to the Scheme were scoped out. Those receptors, whose setting extended to the Scheme, were compared to the Zone of Theoretical Visibility (ZTV) (See Chapter 9: Landscape (document reference TR010035/APP/6.9)). If a receptor was deemed to not be within the ZTV for the Scheme, then it too, has been scoped out of this assessment, for not experiencing any potential impacts from the Scheme due to its distance from the Scheme or intervening topographic form.

7.3.2 Receptors scoped into the assessment are those located within the draft order limits or whose setting are deemed to extend to within the draft order limits and located within the ZTV.

7.3.3 This Chapter presents an assessment of designated and non-designated receptors during both the construction and operation of the Scheme.

Baseline Information

7.3.4 Baseline has been established of all known heritage receptors within a 1km study area within the DBA (Appendix 7.1: Cultural Heritage Desk-Based Assessment (document reference TR010035/APP/6.7.1)).

7.3.5 The DBA was undertaken to obtain information relating to heritage receptors. The DBA was undertaken in line with the Chartered Institute for Archaeologists (CIfA) 'Code of Conduct' (CIfA 2014a) and 'Standards and Guidance for Historic Environment Desk Based Assessments' (CIfA 2014b). Table 7-2 summarises the sources of baseline information and nature of the baseline information obtained.

Table 7-2: Cultural Heritage - Sources consulted to gather baseline information

Source	Baseline Information
English Heritage Archive	Aerial photographs
National Heritage List for England	Data on scheduled monuments and listed buildings all requested and obtained
Landmark Information Group	Historic mapping
Lancashire Archaeological Advisory Service	Heritage receptors, sites and events data including Historic Landscape Character data
North West Wetland Survey	Heritage receptors
Research framework	Sensitivity of heritage receptors and their regional value
Lancashire Archives	Historic mapping and historic background information
British Geological Survey (BGS) website	Information on the prevailing geological conditions within the vicinity of the application site requested and obtained
Unpublished grey literature reports from previous archaeological assessments and investigations within the study areas	Information on the archaeological resource within the study area

7.3.6 Unique identifiers have been applied to all heritage receptors and are displayed in bold following the receptor's name. For non-designated receptors this is a number whilst for designated receptors a prefix and number are used. For Listed Buildings the prefix of LB is used, whilst for Conservation Areas the prefix of CA is employed.

7.3.7 Guidance was also used to inform the baseline information gathering. The following sources were used and referenced where applicable:

- Standards and Guidance for Historic Environment DBA (Chartered Institute for Archaeologists, 2012, updated 2014)
- The Setting of Heritage Assets (English Heritage, 2011, updated 2014)
- National Planning Policy Guidance (NPPG) (Ministry of Housing, Communities and Local Government, 2017)

Surveys

7.3.8 A cultural heritage field reconnaissance walkover was undertaken across the Scheme. The results were reported in the DBA (Appendix 7.1 (document reference TR010035/APP/6.7.1)).

7.3.9 In addition to the DBA (Appendix 7.1 (document reference TR010035/APP/6.7.1)), a programme of archaeological investigations has been undertaken. This includes geophysical survey (Appendix 7.2: Archaeological Geophysical Survey (document reference TR010035/APP/6.7.2)) of the application site within the draft order limits and a geoarchaeological assessment and deposit model of the route (Appendix 7.3: Geoarchaeological Assessment (document reference TR010035/APP/6.7.3)).

7.3.10 The geoarchaeological assessment (Appendix 7.3: Geoarchaeological Assessment (document reference TR010035/APP/6.7.3)) was conducted through an analysis of environmental samples taken during a programme of ground investigation, that was not archaeologically lead or designed, across the route of the Scheme. This assessment was limited by the scope of the ground investigations in their boring and overall coverage of the draft order limits.

Post-scoping and Preliminary Environmental Information Consultation

7.3.11 Further consultation has been undertaken since the receipt of the responses to the EIA Scoping Report and the Preliminary Environmental Information Report (PEIR) to agree a range of issues relevant to this Chapter, Table 3-1 of Chapter 3: Consultation (document reference TR010035/APP/6.3) provides full details.

Identifying Mitigation and Enhancement Measures and Assessing Residual Effects

7.3.12 The approach outlined below has been followed to identify mitigation and enhancement measures and assess likely residual effects to heritage receptors:

- Consideration of best practice / guidance
- Professional judgement
- Consideration of baseline information obtained, Scheme design details and issues raised through consultation with interested parties as a result of responses to the EIA Scoping Report
- Consideration of potential future baseline

- Identification of appropriate mitigation measures, such as vegetation screening / fencing
- Prediction of residual effects based on baseline/future baseline information, Scheme details and Scheme design

7.3.13 Assessment to determine the residual effects on heritage receptors is made based on the following best practice and professional guidance for identifying significant or non-significant effects on a heritage receptor.

7.3.14 The assessment uses the methodology laid out in *DMRB Volume 11 Section 3 Part 2'* (Highways Agency, 2007) and is considered to be a detailed assessment.

7.3.15 The DMRB provides a methodology for assigning value to receptors, magnitude of impact and significance of effects. The criteria used for assigning value of receptors are presented in Tables 7-3, 7-4 and 7-5).

Table 7-3: Cultural Heritage - Table Presenting the Assessment Criteria for the Value of Archaeological Receptors

Value (Sensitivity)	Factors
Very High	World Heritage Sites (including nominated sites). Assets of acknowledged international importance. Assets that can contribute significantly to acknowledged international research objectives.
High	Scheduled Monuments (including proposed sites). Undesignated receptors of schedulable quality and importance. Assets that can contribute significantly to acknowledged national research objectives.
Medium	Designated or undesignated receptors that contribute to regional research objectives.
Low	Designated and undesignated receptors of local importance. Assets compromised by poor preservation and/or poor survival of contextual associations. Assets of limited value, but with potential to contribute to local research objectives.
Negligible	Assets with very little or no surviving archaeological interest.
Unknown	The importance of the resource has not been ascertained.

Table 7-4: Cultural Heritage - Table Presenting the Assessment Criteria for the Value of Historic Buildings

Value (Sensitivity)	Factors
Very High	Structures inscribed as of universal importance as World Heritage Sites. Other buildings of recognised international importance.
High	Scheduled Monuments with standing remains. Grade I and Grade II* Listed Buildings. Other listed buildings that can be shown to have exceptional qualities in their fabric or historical associations not adequately reflected in the listing grade. Conservation Areas containing very important buildings. Undesignated structures of clear national importance.
Medium	Grade II Listed Buildings. Historic (unlisted) buildings that can be shown to have exceptional qualities in their fabric or historical associations. Conservation Areas containing buildings that contribute significantly to its historic character. Historic Townscape or built-up areas with important historic integrity in their buildings or built settings (e.g. including street furniture and other structures).
Low	'Locally Listed' buildings. Historic (unlisted) buildings of modest quality in their fabric or historical association. Historic Townscape or built-up areas of limited historic integrity in their buildings or built settings (e.g. including street furniture and other structures).
Negligible	Buildings of no architectural or historical note; buildings of an intrusive character.
Unknown	Buildings with some hidden (i.e. inaccessible) potential for historic significance.

Table 7-5: Table Presenting the Assessment Criteria for the Value of Historic Landscapes

Value (Sensitivity)	Factors
Very High	World Heritage Sites inscribed for their historic landscape qualities. Historic landscapes of international value, whether designated or not. Extremely well preserved historic landscapes with exceptional coherence, time depth or other critical factors.
High	Designated historic landscapes of outstanding interest. Non-designated landscapes of outstanding interest. Non-designated landscapes of high quality and significance, and of demonstrable national value.

Value (Sensitivity)	Factors
	Well preserved historic landscapes, exhibiting considerable coherence, time-depth or other critical factor(s).
Medium	Designated special historic landscapes. Non-designated historic landscapes that would justify special historic landscape designation, landscapes of regional value. Averagely well-preserved historic landscapes with reasonable coherence, time depth or critical factor(s).
Low	Robust non-designated historic landscapes. Historic landscapes with importance to local interest groups. Historic landscapes whose value is limited by poor preservation and/or poor survival of contextual associations.
Negligible	Landscapes with little or no significant historical interest.

7.3.16 The magnitude of the impact to the heritage assets and how this is assessed is presented in Table 7-6.

Table 7-6: Cultural Heritage - Assessment Criteria for Assessing Impacts to Heritage Receptors, As Outlined in the DMRB

Factors in the assessment of Magnitude of Impacts	
Major	Change to key elements, such that the resource is totally altered. Comprehensive changes to the setting.
Moderate	Change to many key elements, such that the resource is significantly modified. Changes to the setting, such that it is significantly modified.
Minor	Change to key elements, such that the receptor is slightly different. Change to setting, such that it is noticeably changed.
Negligible	Slight changes to elements or setting that hardly affect it.
No change	No change to fabric or setting.

7.3.17 Table 7-5 illustrates how information on the value of the heritage receptor and the magnitude of impact is combined to arrive at an assessment of the level of effect arising from the Scheme. The matrix in Table 7-7 is not intended to 'mechanise' judgement of the significance of effect but to act as a check to ensure that judgements regarding value, magnitude of impact and significance of effect are reasonable and balanced.

Table 7-7: Cultural Heritage- Matrix Indicating the Significance of Effect on a Heritage Receptor.

Assessment of Significance of Effect (Archaeology and Cultural Heritage)					
Value/ Sensitivity	Magnitude of Impact				
	Major	Moderate	Minor	Negligible	No Change
Very High	Very Large	Large or Very Large	Moderate / Large	Slight	Neutral
High	Large / Very Large	Moderate / Large	Moderate / Slight	Slight	Neutral
Medium	Moderate / Large	Moderate	Slight	Neutral / Slight	Neutral
Low	Slight / Moderate	Slight	Neutral / Slight	Neutral / Slight	Neutral
Negligible	Slight	Neutral / Slight	Neutral / Slight	Neutral	Neutral

- 7.3.18 Based on professional judgement and the guidance set out in the Historic Environment Good Practice Advice in Planning Note 2, a 'significant' effect is considered of moderate significance of effect. Effects can be either positive or negative, where a receptor would experience a moderate negative significance of effect a receptor would have the potential to experience substantial harm.
- 7.3.19 Whilst the landscape assessment in Chapter 9: Landscape (document reference TR010035/APP/6.9) considers the contribution of historical elements and features to the character of the existing landscape and evaluates views it does not assess, in detail, potential impacts on the cultural or historical value of these elements or consider effects on the historic context of locations. Therefore, their reporting in multiple chapters should not be considered to be duplication of assessment.

Assumptions and Limitations

- 7.3.20 This assessment was compiled using heritage data obtained from third party sources and the prediction of effects in this Chapter is based on the accuracy of this data. While the data from these sources is generally valid, there can be instances where data is mislabelled, placed in the wrong geographical location, or omitted altogether. However, this information was supplemented with an archaeological walkover, archaeological investigations, archive research and a study of Lidar and aerial photography.
- 7.3.21 Based on archaeological investigations, it is assumed that unknown archaeological remains would be located in the draft order limits.
- 7.3.22 The archaeological record can contain evidence of varying reliability. Antiquarian excavations were conducted to different standards than modern investigations. The results cannot be easily questioned as the remains no longer exist.
- 7.3.23 The archaeological walkover and field reconnaissance survey was carried out within the draft order limits, where access was granted (11 and 12 December 2017 and 4 and 5 April 2018). Permission to carry out the walkover was sought for the whole of the application site and access was taken for all areas where this was granted, and

land was surveyable. This covered 80% of the draft order limits and the results are detailed within the DBA (Appendix 7.1: Cultural Heritage Desk-Based Assessment (document reference TR010035/APP/6.7.1)).

- 7.3.24 Due to access arrangements for the geophysical survey (Appendix 7.2: Archaeological Geophysical Survey (document reference TR010035/APP/6.7.2)), approximately 50% coverage of the draft order limits was surveyed. Access was not achieved in places due to the fields being un-surveyable with crop, woodland and existing road or refusal to grant permission for the survey by land owners. The results of the survey carried out between 11 and 20 June 2018, did not substantially change the assessment of archaeological potential for the Scheme. It is therefore considered unlikely that unknown significant remains would be identified in the remaining area.
- 7.3.25 The assessment within this Chapter assumes that the borrowpits would be used as this represents worst case. If the Contractor once appointed decides not to use the borrowpits the impacts anticipated in the areas the borrowpits would be located would not occur during construction. However, it should also be noted that where the assessment relies upon mitigation within the draft Traffic Management Plan (TMP) (document reference TR010035/APP/7.5) this document accounts for all deficit material coming to site via the local road network and not using the borrowpits.

7.4 Study Area

- 7.4.1 A study area, hereafter referred to as the zone of influence, is a buffer of 1km either side of the draft order limits which has been identified using professional judgement and is shown on Figure 7.1.
- 7.4.2 The use of the 1km zone of influence was established to adequately assess the baseline of known heritage receptors and their settings, and the potential for unknown receptors to be located within the draft order limits. The limited nature of the baseline within a 200m zone of influence (the study area as identified in the DMRB) necessitated a larger zone of influence to help inform likely archaeological potential.
- 7.4.3 The zone of influence was further established with the use of a ZTV see Chapter 9: Landscape (document reference TR010035/APP/6.9).

7.5 Existing and Future Baseline

Existing Baseline

- 7.5.1 Baseline data of the historic environment for the Scheme and 1km zone of influence has been collated from numerous sources. The outline and assessment of the value and significance of individual heritage receptors is provided in full in the archaeological DBA (Appendix 7.1: Cultural Heritage Desk-Based Assessment (document reference TR010035/APP/6.7.1)). The following is a summary of the desk study.

Designated Receptors

- 7.5.2 No designated receptors are located within the draft order limits of the Scheme. However, there are 2 designated receptors which are located within the zone of influence (Figure 7.2). These comprise the Grade II listed Ice House (**LB8**) and Singleton Conservation Area (**CA2**) – further details are provided in Table 7-8.

Table 7-8: Cultural Heritage - Designated Historic Buildings Potentially Affected

Receptor Name	Project ID	Date	Distance from the Draft Order Limits	Value	Interest
The Ice House at Singleton Hall	LB8	Post Medieval	60m to the south	Medium	Historic
Singleton Conservation Area	CA2	Post Medieval	775m to the south	Medium	Historic

- 7.5.3 There are no scheduled monuments, World Heritage Sites, registered battlefields, registered parks and gardens or registered wrecks located within the draft order limits or the zone of influence.
- 7.5.4 There are no designated historic landscapes located within the draft order limits or the zone of influence.
- 7.5.5 The draft order limits are not located within a designated area of high archaeological potential or importance.

Non-designated Receptors - Non-designated Archaeological Remains

- 7.5.6 Within the draft order limits there are a total of 36 non-designated archaeological remains (Figure 7.3), the majority of which are of post-medieval and unknown date (refer to Table 7-9). These illustrate the development of this region within the post-medieval period with an increase in agricultural management and quarrying.
- 7.5.7 A further 7 non-designated archaeological remains are located within the zone of influence, the majority of which date to the post-medieval period. These reflect the development of agricultural practices and quarrying within the region during this period.
- 7.5.8 Geophysical survey (Appendix 7.2: Archaeological Geophysical Survey (document reference TR010035/APP/6.7.2)) within the draft order limits has enhanced the understanding of some non-designated archaeological receptors. Receptors **59**, **179** and **180**, all either ridge and furrow or former field boundaries were identified through the survey results. The remainder of the geophysical survey failed to identify any other features of archaeological interest, with results reflecting geological formations and ferrous metals.
- 7.5.9 Geoarchaeological assessments (Appendix 7.3: Geoarchaeological Assessment (document reference TR010035/APP/6.7.3)) of the draft order limits through borehole analysis identified areas of archaeological significance and interest. A high archaeological potential was identified through the location of peat deposits (**196**) c.2.75m in thickness, east of the draft order limits in areas north and south of Garstang Road East. Further archaeologically sensitive deposits were identified across the draft order limits. These deposits were split across 4 valley locations, however the potential for these deposits to produce evidence of human interaction within the landscape is currently unknown.

Table 7-9: Cultural Heritage - Non-designated Archaeological Remains Potentially Affected

Receptor Name	Project ID	Date	Distance from the Draft Order Limits	Value	Interest
Bronze age pottery	145	Prehistoric (10,000BC-43AD)	Within the draft order limits	Low	Archaeological
Prehistoric finds scatter	159	Prehistoric	Within the draft order limits	Low	Archaeological
Roman road from Ribchester to Poulton Le Fylde	139	Roman (43AD-410)	Within the draft order limits	Low	Archaeological
Romano-British Settlement Activity	112/193	Roman	240m west of the draft order limits	Medium	Archaeological
Historic field boundaries to the south of Garstang Road	62	Medieval (1066-1540)	Within the draft order limits	Low	Archaeological
Field system at Little Singleton	59	Medieval	Within the draft order limits	Low	Archaeological
Ridge and furrow at Singleton Hall	56	Medieval	On the edge of the draft order limits	Low	Archaeological
Ridge and furrow at Singleton Hall	55	Medieval	230m to the south of the draft order limits	Low	Archaeological
Drainage ditch	140	Post-medieval (1540-1901)	Within the draft order limits	Low	Historic
Ridge and furrow to the north of Mains Road	103	Post-medieval	Within the draft order limits	Low	Archaeological
Ridge and furrow within Singleton Estate	142	Post-medieval	Within the draft order limits	Low	Archaeological
Ridge and furrow to the south of Mains Lane	176, 177, 178	Post-medieval	Within the draft order limits	Low	Archaeological
Former clay pits to the south of Garstang road and to the west of Little Singleton	65, 66, 67, 68, 69, 70, 71	Post-medieval	Within the draft order limits	Low	Archaeological

Receptor Name	Project ID	Date	Distance from the Draft Order Limits	Value	Interest
Preston and Wyre Railway	138	Post-medieval	470m to the west of the draft order limits	Medium	Historic
The Poulton and Blackpool Branch Railway	137	Post-medieval	585m to the west of the draft order limits	Medium	Historic
Rectilinear enclosure at Skippool Marsh	187	Unknown	Within the draft order limits	Low	Archaeological
Former quarry pit to the west of Shard Road	166	Unknown	Within the draft order limits	Low	Archaeological
Quarry scoop to the south of Mains Lane	186	Unknown	Within the draft order limits	Low	Archaeological
Embankment to the south of Mains Lane	161	Unknown	Within the draft order limits	Low	Archaeological
Ridge and furrow to the north of Main Dyke	162, 163, 165, 175	Unknown	Within the draft order limits	Low	Archaeological
Former field boundary	183	Unknown	60m to the north of the draft order limits	Low	Archaeological
Possible rectilinear enclosure to the north of Garstang Road	190	Unknown	Within the draft order limits	Low	Archaeological
Covered aqueduct/embankment south of Garstang Road East	167	Unknown	Within the draft order limits	Low	Archaeological
Quarry pits to the south of Garstang Road	169	Unknown	Within the draft order limits	Low	Archaeological
Former field boundary, ridge and furrow, potential hollow and quarry scoop at Singleton Park	179, 184, 181, 180	Unknown	Within the draft order limits	Low	Archaeological

Receptor Name	Project ID	Date	Distance from the Draft Order Limits	Value	Interest
Earthwork platform to the north of Singleton Hall	168	Unknown	Within the draft order limits	Low	Archaeological
Former pond, Singleton Park	191	Unknown	Within the draft order limits	Low	Archaeological
Peat Deposits	196	Unknown	Within the draft order limits	Medium	Archaeological

Non-designated Receptors - Non-designated Historic Buildings

7.5.10 There is 1 non-designated historic building recorded within the draft order limits with 6 recorded within the zone of influence (refer to Figure 7.3 and Table 7-10). These date to the post-medieval period and illustrate the development of settlement within the region during that time.

Table 7-10: Cultural Heritage - Non-designated Historic Buildings Potentially Affected

Receptor Name	Project ID	Date	Distance from the Draft Order Limits	Value	Interest
198-200 Breck Road, Skippool	34	Post-medieval (1540-1901)	9m to the south of the draft order limits	Low	Historic
Singleton Lodge	132	Post-medieval	60m to the south of the draft order limits	Low	Historic
Grotto at Singleton Park	104	Post-medieval	100m to the south of the draft order limits	Low	Historic
Singleton Hall	38	Post-medieval	175m to the south of the draft order limits	Low	Historic
Pointer House	135	Post-medieval	32m to the west of the draft order limits	Low	Historic
Derelict structure to the south of Mains Lane	160	Post-medieval	Within the draft order limits	Low	Historic
Hexagonal red brick structure at Singleton Park (possible sewage tank)	170	Post-medieval	14m to the south of the draft order limits	Low	Historic

Non-designated Receptors - Non-designated Historic Landscapes

7.5.11 The historic landscape character of the Scheme is highly varied. The western most boundary of the draft order limits is characterised by post-medieval enclosure, of varying sizes. The majority of these fields are of an irregular layout.

7.5.12 To the east, Skippool is characterised as modern settlement which consists of

settlement expansion, post 1850. The bulk of the draft order limits, south of Mains Lane, and to the north of Garstang Road is characterised as ancient enclosure. This is defined by an irregular enclosure pattern with sinuous or wavy edged field boundaries. This enclosure is believed to have been established pre-1600.

- 7.5.13 To the south of Garstang Road, and west of Little Singleton, the area is characterised by a combination of post-medieval and modern enclosures. Little Singleton is characterised as an ancient and post-medieval settlement. To the east of Lodge Lane, the land is predominantly characterised as ancient enclosure. The eastern most boundary of the Scheme comprises post-medieval enclosure.
- 7.5.14 The historic landscape character of the Scheme has **low** value and is of **historic** interest for its time-depth contribution to the understanding of the development of the Scheme's landscape as an historic, archaeological receptor.
- 7.5.15 There are 2 non-designated historic landscape receptors identified within the zone of influence and draft order limits. These are Singleton Park (**151**) which is the wider estate of Singleton Hall (**38**) (Figure 7.3). The estate houses enclosed gardens and was recommended for inclusion in Historic England's Register of Parks and Gardens but remains unregistered. The park is **low** value and has **historic** interest. It forms the primary setting for all receptors within its perimeters. The setting of this receptor is informed by its rural location and the contemporary receptors within it. Its setting contributes to its significance and extends to within the draft order limits. Through time, the park has lost continuity and lacks coherence as a park and now exists as part agricultural land and part private gardens.
- 7.5.16 The second non-designated historic landscape is located within the draft order limits. The 19th century gardens (**152**) at Bankfield House is located on the northern edge of the A585, 940m west of Windy Harbour junction. The gardens are **low** value and of **historic** interest. The receptor's setting is influenced by its association with Bankfield House.

Future Baseline

- 7.5.17 It is anticipated that there would be no changes to the future baseline, between the submission of the Development Consent application to construction commencing (Spring 2020). This assessment accounts for the known designated and non-designated receptors along with the potential for there to be unknown archaeology present within the draft order limits. Furthermore, the application of survey assessments (archaeological geophysical survey (document reference TR010035/APP/6.7.2) and geoarchaeological assessment (document reference TR010035/APP/6.7.3)) has ground truth the baseline within the draft order limits.

Receptors Potentially Affected (including Value / Sensitivity)

- 7.5.18 The following tables list the archaeological (Table 7-11), historic building (Tables 7-12 and 7-13) and historic landscape (Table 7-14) receptors which may potentially be affected by the Scheme and provides an assessment of the value / sensitivity of that receptor (refer to Figure 7.2 and 7.3 for location).

Table 7-11: Cultural Heritage - Non-designated Archaeology- Receptors Potentially Affected and Value / Sensitivity of Receptors

Receptor	Value / Sensitivity
Ridge and Furrow, Singleton (55)	Low
Ridge and Furrow, Singleton (56)	Low
Field system at Little Singleton (59)	Low
Historic field boundaries, south of Garstang Road (62)	Low
Clay pit, south of Garstang Road (65)	Low
Clay pit, south of Garstang Road (66)	Low
Clay pit, north of Garstang Road (67)	Low
Clay pit, south of Garstang Road (68)	Low
Clay pit, south of Garstang Road (69)	Low
Clay pit, south of Garstang Road (70)	Low
Clay pit, west of Lodge Lane (71)	Low
Ridge and furrow, Mains Road (103)	Low
Romano-British Settlement Activity (112/193)	Medium
Poulton and Blackpool Branch Railway (137)	Medium
Preston and Wyre Railway (138)	Medium
Ribchester to Poulton-le-Fylde Roman road (139)	Low
Drainage Ditch (140)	Low
Ridge and furrow, Singleton Estate (142)	Low
Bronze Age Pottery Find Spot, Skippool Bridge (145)	Low
Prehistoric flint scatter and associated Medieval pottery (159)	Low
Embankment identified during walkover survey (161)	Low

Receptor	Value / Sensitivity
Ridge and furrow identified during archaeological walkover survey (162)	Low
Ridge and furrow identified during archaeological walkover survey (163)	Low
Ridge and furrow identified during archaeological walkover survey (165)	Low
Former quarry pit, Shard Road (166)	Low
Covered aqueduct identified through cartographic analysis (167)	Low
Earthwork Platform, Singleton Park identified during walkover survey (168)	Low
Series of potential quarry pits identified during the walkover survey (169)	Low
Former field boundary identified during the walkover survey (174)	Low
Ridge and furrow identified during walkover survey (175)	Low
Ridge and furrow identified through LiDAR (176)	Low
Ridge and furrow identified through LiDAR (177)	Low
Ridge and furrow identified through LiDAR (178)	Low
Former field boundary identified through LiDAR analysis (179)	Low
Potential quarry scoop identified through LiDAR (181)	Low
Former field boundary identified through LiDAR (183)	Low
Potential hollow identified through LiDAR (184)	Low
Quarry scoop identified through LiDAR (186)	Low
Rectilinear structure identified through Cartographic analysis (187)	Low
Structure (site of) identified through aerial photography analysis (189)	Low
Potential rectilinear enclosure identified through aerial photography analysis (190)	Low
Former pond in singleton Park, identified through aerial photography analysis (191)	Low
Peat deposits located either side of Garstang Road East (196)	Medium

Table 7-12: Cultural Heritage - Designated Historic Buildings- Receptors Potentially Affected

Receptor	Value / Sensitivity
Ice House (LB8)	Medium
Singleton Conservation Area (CA2)	Medium

Table 7-13: Cultural Heritage - Non-designated Historic Buildings- Receptors Potentially Affected

Receptor	Value / Sensitivity
198-200 Breck Road, Skippool (34)	Low
Singleton Hall (38)	Low
Grotto, Singleton Park (104)	Low
Singleton Lodge (132)	Low
Pointer House (135)	Low
Derelict structure identified during the walkover survey (160)	Low
Hexagonal red brick structure identified during the walkover survey (170)	Low

Table 7-14: Cultural Heritage - Non-designated Historic Landscapes- Receptors Potentially Affected

Receptor	Value / Sensitivity
Singleton Park (151)	Low
19 th Century Gardens at Bankfield House (152)	Low
Historic Landscape Character	Low

7.6 Mitigation and Enhancement Measures

Construction

- 7.6.1 Archaeological assessment and mitigation is a phased successive approach where the results from one phase inform the next. The results of the geophysical survey and geoarchaeological assessment have informed how mitigation is approached. Trial trenching would be used to target identified receptors and located within the draft order limits. Trial trenches would also be used to target areas of the Scheme

where, as yet, no receptors have been identified to test the performance of the assessment techniques. The trenches would reveal the presence or absence of archaeological receptors. If archaeological remains are present, they can be assessed and characterised. If appropriate, archaeological mitigation could include open-area excavation and or archaeological monitoring during construction.

- 7.6.2 Any archaeological remains identified during the trial trench evaluation may be considered for mitigation if considered of sufficient significance. The exact form of this mitigation would be defined and outlined in a Mitigation Strategy and draft Written Scheme of Investigation (WSI) following the completion of the trial trenching. This mitigation would be devised in consultation with the local planning archaeological advisor. This would most likely comprise an aspect of open area excavation within discrete areas or archaeological monitoring during construction.
- 7.6.3 Areas deemed less archaeologically significant but still requiring archaeological recording would be subject to a programme of archaeological monitoring. This monitoring or 'watching brief' would be undertaken during the top soil strip on specific areas of the Scheme where archaeological potential is identified. This would help to identify any previously unrecorded archaeological remains within the Scheme and would provide a preservation by record. The archaeological monitoring would be undertaken in accordance with the Mitigation Strategy and draft WSI noted above.
- 7.6.4 Where results from geophysical surveys provide sufficient detail on a heritage receptor within the draft order limits, no further mitigation has been proposed. This has been applied to ridge and furrow and former field boundaries (**59**) located to the west of Lodge Lane.
- 7.6.5 Following consultation with the local planning archaeological advisor, no ridge and furrow identified within the draft order limits would be mitigated through any further archaeological fieldwork. Where trial trenches are located within the proximity of ridge and furrow receptors, investigations would focus on ascertaining the presence or absence of archaeological receptors below these agricultural remains.
- 7.6.6 Mitigation through open area excavation and or archaeological watching brief would be outlined in the Mitigation Strategy and draft WSI. Based on the known archaeological resource within the draft order limits, the following mitigation is proposed for receptors impacted by construction.
- 7.6.7 Archaeological monitoring would mitigate impacts to the following receptors:
- The potential archaeological remains associated with the prehistoric finds scatter (**159**) and bronze age pottery (**145**)
 - The possible Ribchester to Poulton-le-Fylde Roman Road (**139**)
 - Historic field boundaries to the south of Garstang Road (**62**)
 - Drainage Ditch at Skippool (**140**)
 - 6 former clay pits recorded to the south of Garstang Road and to the west of Little Singleton (**65, 66, 68, 69, 70, 71**)
 - A former quarry pit to the west of Shard Road (**166**)
 - A quarry scoop located to the south of Mains Lane at Skippool (**186**)
 - The covered aqueduct or embankment to the south of Garstang Road East

(167)

- Quarry pits to the south of Garstang Road East (169)
- A former pond (191) within Singleton Park
- A derelict structure (160) would be monitored during demolition and during initial strip of material at the start of construction impacts. (see below for additional mitigation)

- 7.6.8 Further archaeological mitigation would occur in the form of building surveying or through archaeological excavation or monitoring, as deemed appropriate. Where archaeological excavation is proposed as mitigation, this would be informed after a phase of trial-trenching. The following receptors would be mitigated through this method.
- 7.6.9 There is the potential for the known Romano-British settlements (112/193) to extend to within the draft order limits of the Scheme. Therefore, the area of potential would be tested with trial trenching to determine the validity of the potential. Mitigation may follow, including open area excavation, dependent on the results of the trial trenching.
- 7.6.10 The rectilinear enclosure at Skippool Marsh (187) would be impacted by the construction of the temporary site compound. These impacts could result in the partial or complete removal of the below ground archaeological remains associated with this receptor. The potential would be tested with trial trenching. Mitigation may follow, including open area excavation, dependent on the results of the trial trenching.
- 7.6.11 A derelict structure (160) which was identified during the archaeological walkover survey would be impacted during construction of the Scheme. These impacts would result in the complete removal of this receptor and any associated below ground archaeological remains. Mitigation would comprise a Level 1 survey as defined by Historic England (Historic England, 2016) prior to demolition, archaeological monitoring during demolition, and during initial strip of material at the start of construction impacts.
- 7.6.12 The former building (189), identified to the south of the derelict structure (160) via aerial photography analysis would be impacted during construction of the Scheme. These impacts would result in the complete removal of any below ground archaeological remains related to the former building. Trial trenching would be used to assess the survival of any remains of the former building. Mitigation may follow, including open area excavation, dependent on the results of the trial trenching.
- 7.6.13 The embankment to the south of Mains Lane (161), would also be impacted by construction. These impacts could result in the complete or partial removal of this receptor. Trial trenching would be used in the first instance to assess the archaeological significance of any below ground remains. Mitigation may follow, including open area excavation, dependent on the results of the trial trenching.
- 7.6.14 A former field boundary (174) identified during the walkover survey would be impacted by construction. These impacts would result in the complete or partial removal of this receptor. Trial trenching would be used primarily as a means of attaining a date of the receptor. Mitigation may follow through archaeological monitoring during construction, if appropriate following trial trenching.

- 7.6.15 A potential rectilinear enclosure to the north of Garstang Road East (**190**) would be impacted during the construction of the new road. These impacts could result in the complete or partial removal of this heritage receptor. Appropriate mitigation would follow trial trenching to determine the significance of any remains present.
- 7.6.16 Peat deposits (**196**) identified through geoarchaeological assessment (Appendix 7.3: Geoarchaeological Assessment (document reference TR010035/APP/6.7.3)) have potential to provide information of past human activity on the region. In addition to the peat deposits, other geological deposits were identified across 4 valley locations within the draft order limits.
- 7.6.17 To establish an appropriate Mitigation Strategy and draft WSI from the impacts of the Scheme a phase of additional assessment is proposed to characterise the deposits more fully. This would comprise archaeological trial trenching and boreholes to gain a better understanding of the archaeological value of these deposits, across all 4 valley locations, as well as the peat deposits (**196**), identified in the geoarchaeological assessment (Appendix 7.3: Geoarchaeological Assessment (document reference TR010035/APP/6.7.3)). Dependent on the results of the assessment, proposed mitigation would be either open-area excavation or archaeological monitoring.
- 7.6.18 A series of archaeological receptors in Singleton Park would be targeted by trial trenching. This would help with the dating and significance of archaeological receptors within this area of the Scheme. Trial trenches would target the relationships between a former field boundary (**179**) and earthwork platform (**168**) and also LiDAR features **180** former field boundary, **181** quarry scoop and **184** potential hollow. Dependent on the results of the trial trench assessment, proposed mitigation would be either open-area excavation or archaeological monitoring.
- 7.6.19 In the event of human remains being found during the course of the works the works would immediately stop and the Highways England Project Team Manager would be notified immediately. The local area around the remains would be immediately isolated and protected by the Contractor. Work in the area would not recommence without the prior approval of the Highways England Project Manager. Professional archaeological procedures would take place and if appropriate a coroner's licence may be applied for from the Ministry of Justice.
- 7.6.20 All written records of the archaeological investigations undertaken for the Scheme would be completed and submitted in a timely manner. A copy of any analysis, reporting or publication required as part of the mitigation strategy would be deposited at Lancashire County Council HER within 1 year of completion of the Scheme or such other period as may be agreed in writing by the planning authority.
- 7.6.21 Where low value receptors such as ridge and furrow have been identified through assessment, such as LiDAR and geophysical survey, and where the orientation and extent is recorded, no further mitigation to record these receptors is proposed.
- 7.6.22 The flow of construction traffic would be controlled in areas surrounding Conservation Areas. The draft TMP (document reference TR010035/APP/7.5) has identified restricted routes available to construction traffic, located on the eastern edge of Poulton-le-Fylde and 1 leading through the centre of Singleton (**CA2**). It is envisaged that the restricted construction traffic route though Singleton (**CA2**) would only be a contingency route, used if other options were blocked.

- 7.6.23 Prior to any mitigation works being undertaken archaeological contractors, working on behalf of the applicant, would be required to submit and agree the final WSI with the local planning archaeological advisor prior to the commencement of this work. The WSI would be based on the Mitigation Strategy and a draft WSI anticipated to be prepared during the DCO examination.
- 7.6.24 Mitigation measure detailed above are outlined and secured within the Record of Environmental Actions and Commitments (document reference TR010035/APP/7.3) which forms an appendix to the Outline Construction Environmental Management Plan (CEMP) (document reference TR010035/APP/7.2).

Operation

- 7.6.25 Operational mitigation is outlined in detail in the Environmental Masterplan. (document reference TR010035/APP/6.19). This outlines elements of screening in the form of woodland planting, individual tree planting and linear planting to help reduce potential visual intrusions to heritage receptors from the Scheme. It also outlines noise mitigation in the form of acoustic barriers and bunds, located within the draft order limits along the Scheme.
- 7.6.26 Screening mitigation is proposed in the form of new woodland planting within Singleton Park to help reduce visual intrusions to the setting of the Ice House (**LB8**) at Singleton Hall. Despite the receptor currently being located with woodland, additional planting would help to maintain the immediate isolated setting of the receptor from the Scheme. Mitigation would also comprise acoustic fencing to help mitigate the operational increase in noise based on traffic modelling (See Chapter 11: Noise and Vibration (document reference TR010035/APP/6.11)).
- 7.6.27 Acoustic fencing would help to maintain the wider setting of Singleton Conservation Area (**CA2**) by reducing any noise intrusion from the Scheme.
- 7.6.28 The Scheme is located within the setting of ridge and furrow recorded at Singleton Park (**56**). No mitigation is proposed.
- 7.6.29 The Scheme extends to the setting of 5 non-designated historic buildings (**34, 132, 104, 38, 135**) and would experience change during operation. These impacts to their significance would result from visual intrusion. These impacts would be reduced through screening resulting from planting as detailed in the Environmental Masterplan (document reference TR010035/APP/6.19).
- 7.6.30 Operation of the Scheme would impact the historic landscape character. These impacts would be reduced through mitigation which is detailed in the Environmental Masterplan (document reference TR010035/APP/6.19).
- 7.6.31 Operation would also impact Singleton Park (**151**). These impacts would be cutting across the historical boundary of the park as well as visual intrusion. Screening is proposed as detailed in the Environmental Masterplan (document reference TR010035/APP/6.19). Planting around the Scheme in Singleton Park would maintain the characteristic blocks of woodland currently present within the park. By doing this, intermittent views from the south of the Park to the northern edge would be maintained whilst preserving an overall green nature to the parkland.

7.7 Residual Effects

7.7.1 The following section assesses the potential residual effects on the individual receptors identified in Section 7.5, following the implementation of mitigation measures identified in Section 7.6.

Construction

Designated Heritage Buildings

7.7.2 Construction activity such as an increase in traffic within the surrounding area and noise and visual intrusion from construction activity has the potential to affect the setting of Singleton Conservation Area (**CA2**). These temporary impacts to the receptors significance, with mitigation which comprise routing construction traffic away from the Conservation Area and only permitting traffic through the sensitive area when other routes are blocked, would result in a **negligible** magnitude of impact to this **medium** value receptor which results in a **neutral / slight** significance of effect. In terms of EIA this would **not be significant**.

7.7.3 The setting of the Grade II listed Ice House at Singleton Hall (**LB8**) would experience change during construction. These temporary impacts to part of the receptors significance would result from construction activity and comprise noise and potentially visual intrusion from within the draft order limits. No mitigation is proposed for this impact of this temporary activity, there would be a **moderate** magnitude of impact to this **medium** value receptor which results in a **moderate** significance of effect.

7.7.4 The identified impact to a designated historic building during construction is temporary and reversible. The moderate significance of effect identified is only to the receptors setting and does not impact physically on the structure of the Ice House. Overall this effect is considered **significant** in terms of EIA based on the matrix at Table 7-7 but it is considered that the receptor would not experience substantial harm.

Non-designated archaeological remains - Prehistoric period (10,000BC-43AD)

7.7.5 Construction activities relating to the New Skippool Bridge Junction and the New Lodge Lane Bridge would result in the removal of the potential archaeological remains associated with both the prehistoric finds scatter (**159**) and bronze age pottery (**145**) respectively. With mitigation, the magnitude of impact to these **low** value receptors would be **moderate** which results in a **slight** significance of effect. In terms of EIA this would **not be significant**.

Non-designated archaeological remains - Roman period (43AD- 410)

7.7.6 Work within the draft order limits to the west of Skippool could result in the partial removal or impact to the possible Ribchester to Poulton-le-Fylde Roman Road (**139**). With mitigation, which would comprise archaeological monitoring, the magnitude of impact to this **low** value receptor would be **minor** resulting in a **neutral / slight** significance of effect. In terms of EIA this would **not be significant**.

7.7.7 The Scheme could have an impact to any potential archaeological remains associated with the known Romano-British settlements (**112/193**) to the west of the Main Dyke at Moorfield Park. Work within the draft order limits to the north of

Garstang Road would result in the direct loss of any archaeological remains related to these receptors. Trial trenching is proposed in this area which would inform the appropriate form of mitigation. Following mitigation, which could comprise archaeological open area excavation, the magnitude of impact to these **medium** value receptors would be **moderate** resulting in a **moderate** significance of effect. In terms of EIA this would be a **significant** effect.

Non-designated archaeological remains - Medieval period (1066- 1540)

- 7.7.8 Construction activities associated with the road and the new Lodge Lane Bridge would result in the partial removal of below ground archaeological remains associated with the historic field boundaries to the south of Garstang Road (**62**). With mitigation, the magnitude of impacts to this **low** value receptor would be **minor** which results in a significance of effect of **neutral / slight**. In terms of EIA this would **not be significant**.
- 7.7.9 Geophysical surveys have provided further information regarding receptor **59**. Results of the survey has shown the extent of the ridge and furrow and the south-west north-east orientation of the receptor. Evidence of a former field boundary was also located within the area of geophysical survey, corresponding to the HER data. No further mitigation is proposed for this receptor. Following the results of the geophysical survey the magnitude of impact to this **low** value receptor would be **minor** which results in a significance of effect of **neutral / slight**. In terms of EIA this would **not be significant**.
- 7.7.10 There is the potential for construction activity relating to the new road to impact the ridge and furrow at Singleton Hall and its setting (**56, 55**) which is situated 230m to the south of the draft order limits. These impacts would be mitigated by minimising the amount of construction traffic and associated activities within this area, through the implementation of Lodge Lane 130m west of the receptors as a restricted route. This would result in a **negligible** magnitude of impact to this **low** value receptor and a **neutral / slight** significance of effect. In terms of EIA this would **not be significant**.

Non-designated archaeological remains - Post-medieval period (1540-1901)

- 7.7.11 As a result of the redevelopment of Skippool bridge, there would be an impact to the drainage ditch at Skippool and any associated earlier archaeological remains (**140**). With mitigation which would be archaeological monitoring, the magnitude of impacts to this **low** value receptor would be **negligible** which results in a **slight / neutral** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.12 The bird mitigation area and the temporary site compound would result in the partial or complete removal of 2 areas of ridge and furrow which are located within the draft order limits to the north of Mains Lane (**103**) and within Singleton Estate (**142**) respectively. No mitigation is proposed. Impacts to these **low** value receptors would be **minor** which results in a **slight / neutral** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.13 Construction is likely to remove below ground archaeological remains associated with ridge and furrow which was recorded to the south of Mains Lane (**176, 177, 178**). No mitigation is proposed. The magnitude of impacts to these **low** value receptors would be **minor to moderate** resulting in a **slight – slight / neutral** significance of effect. In terms of EIA this would **not be significant**.

- 7.7.14 The 5 former clay pits recorded to the south of Garstang Road and to the west of Little Singleton (**65, 66, 68, 69, 70**) would be partially or completely removed during construction of the new road and the new Lodge Lane Bridge. The clay pit (**67**) to the north of Garstang Road would be partially or completely removed by the location of the construction compound. Following mitigation, the magnitude of impact to these **low** value receptors would be **moderate** which results in a **slight** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.15 The below ground remains associated with the structure (**189**) identified through aerial photographic analysis are likely to be removed during construction. Following mitigation, the magnitude of impact to these **low** value receptors would be **moderate**, resulting in a **slight** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.16 Construction activity has the potential to impact the significance of the 2 railways at Poulton-le-Fylde (**138, 137**) as the Scheme is located within the setting of the receptors. These impacts are temporary and reversible and relate to a potential increase in construction traffic within the area. The traffic management would help reduce the traffic but no specific mitigation for these identified receptors is proposed. This would result in a **minor** magnitude of impact to these **medium** value receptors resulting in a **slight** significance of effect. In terms of EIA this would **not be significant**.

Non-designated archaeological remains - Unknown date

- 7.7.17 The rectilinear enclosure at Skippool Marsh (**187**) would be impacted by the construction of the temporary site compound. These impacts could result in the partial or complete removal of the below ground archaeological remains associated with this receptor. Following mitigation, the magnitude of impact to this **low** value receptor would be **moderate**, resulting in a **slight** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.18 The former quarry pit (**166**) to the west of Shard Road would be impacted by the construction of the proposed bird mitigation area. This impact could result in the partial or complete removal of this receptors and the below ground archaeological remains associated with it. Following mitigation, there would be a **moderate** impact to this **low** value receptor which results in a **slight** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.19 The derelict structure which was identified during the archaeological walkover survey (**160**) would be impacted during construction of the new road. These impacts would result in the complete removal of this receptor and any associated below ground archaeological remains. Following mitigation, impacts to this **low** value receptor would result in a **moderate** magnitude of impact and **slight** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.20 The quarry scoop to the south of Mains Lane at Skippool (**186**) would be impacted by the construction of the new road. These impacts could result in the complete or partial removal of this **low** value receptor. Following mitigation, the construction impact would result in a **minor** magnitude of effect which results in a **slight / neutral** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.21 The embankment to the south of Mains Lane (**161**), would also be impacted by

construction. These impacts could result in the complete or partial removal of this receptor. Following mitigation, the magnitude of impact to this **low** value receptor would be **moderate**, resulting in a **slight** significance of effect. In terms of EIA this would **not be significant**.

- 7.7.22 The areas of ridge and furrow which were identified to the north of Main Dyke (**162, 163, 165, 175**) would be impacted by the Scheme. These impacts could entail the complete or partial removal of these heritage receptors. No mitigation is proposed. Impacts to these **low** value receptors are considered to be **minor to moderate** which would result in a **slight – neutral / slight** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.23 The potential rectilinear enclosure to the north of Garstang Road East (**190**) would be impacted during the construction of the new road. These impacts could result in the complete or partial removal of this heritage receptor. Following assessment of the receptor through trial-trenching, further archaeological mitigation may be required in the form of open-area excavation or archaeological monitoring. After this mitigation, the magnitude of impact to this **low** value receptor would be **moderate** resulting in a **slight** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.24 The covered aqueduct or embankment to the south of Garstang Road East (**167**) would be impacted during the construction of the new Poulton Junction and the new road. These impacts could result in the complete or partial removal of this receptor. Following mitigation, the magnitude of impacts to this **low** value receptor would be **moderate** which results in a **slight** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.25 The quarry pits to the south of Garstang Road (**169**) would be impacted during construction. These impacts could result in the complete or partial removal of these below ground archaeological remains. Following mitigation, which would comprise archaeological monitoring impacts to this **low** value receptor are considered to be **minor to moderate** resulting in a **slight – neutral / slight** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.26 The potential hollow (**184**), quarry scoop (**181**), earthwork platform (**168**) and pond (**191**) within Singleton Park have the potential to be impacted during construction. These impacts would result in the removal of all or part of these receptors. Following mitigation, the magnitude of impact to these **low** value receptors is considered to be **minor to moderate** which results in a **slight -neutral slight** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.27 The former field boundaries (**179** and **180**) also located within Singleton Park Results of the survey have reflected the interpretation and location of the former field boundary identified during LiDAR analysis. Following mitigation, the magnitude of impact to these **low** value receptors is considered to be **minor** which results in a **slight / neutral** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.28 There is the potential that construction would impact the significance of the former field boundary to the north of the draft order limits (**183**) as the Scheme is located within its setting. No mitigation is proposed. The magnitude of impact to this **low** value receptor would be **minor** which results in a **slight / neutral** significance of effect. In terms of EIA this would **not be significant**.

7.7.29 The geoarchaeological assessment of the Scheme (Geoarchaeological Assessment (document reference TR010035/6.7.3)) identified a significant area of waterlogged peat deposits (**196**) up to c.2.75m in thickness and areas of tidal mudflats with palaeoenvironmental potential within the draft order limits to the east of the Romano-British settlements (**112/193**). The nature of the peat deposits in this area were deemed archaeologically significant and may have been historically exploited due to the available natural resources. With mitigation, which would comprise archaeological trial trenching and boreholes within the draft order limits, the magnitude of impact to these **medium** value receptors (**196**) would be **moderate** resulting in a **moderate** significance of effect. In terms of EIA this would be a **significant** effect.

7.7.30 Following results of the geoarchaeological assessment (Appendix 7.3: Geoarchaeological Assessment (document reference TR010035/APP/6.7.3)) it was identified that construction of the Scheme could impact on a variety of archaeologically sensitive deposits across the draft order limits. Questions remain as to the potential these deposits hold for producing further information of past human interactions with the landscape of the Scheme and wider area. As a result of this assessment, mitigation measures were proposed to target data gaps and representative sequences across the 4 valley locations the draft order limits cover.

Non-designated Historic Buildings - Post-medieval period (1540-1901)

7.7.31 The setting of the hexagonal red brick structure (**170**) within Singleton Park would experience change and its significance would be impacted during construction. Its function was not established during the site visits, but modern mapping suggests that it might be the top of a sewage tank. These impacts would be a visual and noise intrusion alongside an increase in dust within the area. These impacts would be temporary and reversible. No mitigation is proposed, the magnitude of impacts to this **low** value receptor would be **minor** resulting in a **neutral / slight** significance of effect. In terms of EIA this would **not be significant**.

7.7.32 The setting of several non-designated historic buildings (**34, 132, 104, 38, 135**) would experience change and their significance would be impacted during the construction phase. These impacts would be a visual and noise intrusion alongside an increase in dust within the area. These impacts would be temporary and reversible. No mitigation is proposed, the magnitude of impact to these **low** value receptors would be **minor** resulting in a **neutral / slight** significance of effect. In terms of EIA this would **not be significant**.

Non-designated Historic Landscapes

7.7.33 Construction of the Scheme would impact the historic landscape character. These impacts would comprise the removal of historic land boundaries alongside a visual and noise impact to the overall character of the area. These impacts would be temporary and reversible but would not be subject to mitigation. The magnitude of impacts to this **low** value receptor would be **moderate** resulting in a **slight** significance of effect. In terms of EIA this would **not be significant**.

7.7.34 Construction activities would impact the northern limit of Singleton Park (**151**). These impacts would result in partial removal of a relic part of the receptor and visual and noise intrusion alongside an increase in dust within the area. The visual and noise intrusion impacts would be temporary and reversible. No mitigation is proposed. The

magnitude of impact to this **low** value receptor would be **neutral / slight** resulting in a **slight** significance of effect. In terms of EIA this would **not be significant**.

- 7.7.35 Construction activity would impact the 19th century gardens at Bankfield House (152). These impacts would result in a change in the setting to the receptor due to visual and noise intrusion, as well as an increase in dust within the area. These impacts to the receptor's significance would be temporary and reversible. Although the HER asset is located within the draft order limits, it is proposed that there would be no physical impact to the receptor from construction activity of the Scheme. No specific cultural heritage mitigation is proposed. The magnitude of impact to this **low** value receptor would be **minor** resulting in a **neutral / slight** significance of effect. In terms of EIA this would **not be significant**.

Operation

Designated Historic Buildings

- 7.7.36 Impacts during operation would be limited to impacts on the setting of heritage receptors only.
- 7.7.37 There is the potential for the Scheme to affect the setting of Singleton Conservation Area as a result of increased noise levels (CA2). However, with in place mitigation comprising acoustic fencing, there would be a **negligible** magnitude of impact to this **medium** value receptor which results in a **neutral / slight** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.38 The setting of the Grade II listed Ice House at Singleton Hall (LB8) would change during operation. The noise and visual intrusion from traffic would impact its significance. The diversion of the route towards the receptor would change the setting experienced due to the presence of the road and the increased proximity of traffic. However, there is only a slight increase in noise based on the traffic modelling (See Chapter 11: Noise and Vibration (document reference TR010035/APP/6.11)). The scheme would also introduce a change to the receptor's primary aspect and sever the link of this parkland feature to the relic parkland to the north. The Scheme introduces a significant modification to the wider setting of the receptor. This change impacts how the significance of the receptor is understood. The functional and historical association with Singleton Hall would remain. Mitigation would comprise an area of new woodland planting around the existing planting within Singleton Park together with acoustic fencing. Planting would result in an additional area of separation between the Ice House (LB8) and the Scheme, consequently helping to maintain the green rural setting of the receptor. With mitigation, there would be a **moderate** magnitude of impact to this **medium** value receptor which results in a **moderate** significance of effect.
- 7.7.39 The moderate significance of effect identified is only to the receptor's setting and does not impact physically on the structure of the Ice House (LB8). Furthermore, the impact does not seriously affect its association with Singleton Hall, a key element of its special interest. Overall this effect is considered **significant** based on the matrix at Table 7-7. However, it is considered that the receptor would not experience substantial harm in accordance with the NN NPS.

Non-designated archaeological remains - Medieval period (1066-1540)

- 7.7.40 Operation would result in an impact to the significance, resulting in a change to the

setting, of ridge and furrow that is recorded at Singleton Park (**56**). This would result in a **negligible** magnitude of impact to this **low** value receptor and a **neutral / slight** significance of effect. In terms of EIA this would **not be significant**.

Non-designated archaeological remains - Unknown date

- 7.7.41 The setting of a non-built archaeological receptor (**183**,) has the potential to change and its significance impacted during operation with an increase in visual and noise intrusion. These **negligible** impacts to the setting of a **low** value receptor results in **neutral / slight** significance of effect. In terms of EIA this would **not be significant**.

Non-designated historic buildings - Post-medieval period (1540-1901)

- 7.7.42 The setting of 5 non-designated historic buildings (**34, 132, 104, 38, 135**) would experience change and their significance impacted during operation. These impacts would be a visual and noise intrusion. Following mitigation, the magnitude of impact to these **low** value receptors would be **minor** resulting in a **slight** significance of effect. In terms of EIA this would **not be significant**.

Historic Landscapes

- 7.7.43 Operation of the Scheme would impact the historic landscape character. These impacts would comprise a visual and noise impact to the overall character of the area. Following mitigation, the magnitude of impacts to this **low** value receptor would be **moderate** resulting in a **slight** significance of effect. In terms of EIA this would **not be significant**.

Historic Landscapes- Post-medieval period (1540-1901)

- 7.7.44 Operation would also impact Singleton Park (**151**). Following mitigation, the magnitude of impact to this **low** value receptor would be **minor** resulting in a **slight / neutral** significance of effect. In terms of EIA this would **not be significant**.
- 7.7.45 Operation would have a positive change to the setting of the 19th century gardens at Bankfield House (**152**). The maintenance of the shrubs and existing tree planting associated to the receptor would maintain the current setting. Furthermore, the re-direction of traffic further south from the existing line of the A585 would result in a positive contribution to the receptor's wider setting. No mitigation is proposed. The magnitude of impact to this **low** value receptor would be **negligible** resulting in a **neutral / slight** significance of effect. In terms of EIA this would **not be significant**.

7.8 **Monitoring**

- 7.8.1 This assessment has identified 3 receptors which, in terms of the EIA, are likely to experience a significant effect as a result of the Scheme. These include the Ice House at Singleton Park (**LB8**), potential archaeological remains associated to the Romano-British settlement at Moorfield Park (**112/193**) and peat deposits (**196**). These receptors (**LB8, 112/193, 196**) would be subject to a **moderate** significance of effect from both the construction and operation of the Scheme. This impact results from direct impacts to receptors **112/193** and **196**, while **LB8** would experience impacts to significance resulting from visual intrusion.
- 7.8.2 All other impacts to heritage receptors within the Scheme and the zone of influence, in the terms of EIA, are not considered to be significant. These impacts would be

mitigated through a combination of screening, archaeological monitoring and excavation and historic building recording.

- 7.8.3 The archaeological watching brief and trial trenching would be undertaken by subcontractors and this work would be monitored to ensure that it is being carried out to satisfy current professional guidance (ClfA 2014c, ClfA 2014d).
- 7.8.4 Historic building recording would also be undertaken by subcontractors and it would be monitored to ensure that it is completed to ClfA standard and guidance (CIFA 2014e).
- 7.8.5 A draft WSI together with a Mitigation Strategy would be produced in consultation with the local planning archaeological advisor to Lancashire County Council, prior to the commencement of any archaeological works and as part of the Examination. This would set out the standards expected of the archaeological contractor and the scope of works.

7.9 **Summary**

- 7.9.1 The following section presents a summary of the baseline conditions and residual effects of the A585 Windy Harbour to Skippool Improvement Scheme.
- 7.9.2 There is a total of 54 heritage receptors within the draft order limits and the zone of influence. A total of 39 heritage receptors are located within the draft order limits. The majority of the 39 receptors within the draft order limits date to the post-medieval period. These are all of **low** value and **historic / archaeological** interest for the development of this region during the post-medieval period. The peat deposits (**196**) of unknown date are of **medium** value and **archaeological** interest.
- 7.9.3 The remaining 15 heritage receptors that are located within the zone of influence comprise 4 receptors of **medium** value which consist of the Grade II listed Ice House (**LB8**), Singleton Conservation Area (**CA2**) and 2 railways (**138, 137**). The remaining 11 heritage receptors within the zone of influence are all of **low** value and **historic/archaeological** interest.
- 7.9.4 The significance of the Grade II listed Ice House at Singleton Hall (**LB8**) would be impacted during both construction and operation. The rural setting of the Ice House is a contributor to the receptor's significance. Impacts are predicted to be a **moderate** significance of effect which is considered to be significant.
- 7.9.5 Archaeological remains located within the draft order limits and any potential associated with the Romano-British settlement receptors (**112/193**), north of Garstang Road would be impacted during construction. Impacts are predicted to be a **moderate** significance of effect which is considered to be significant.
- 7.9.6 All other effects to heritage receptors are considered to be **slight adverse or neutral**.

7.10 References

- Arcadis (2017) *Preliminary Environmental Information Report*
- Arcadis (2018) *A585 Windy Harbour to Skippool Improvement Scheme Cultural Heritage Desk-Based Assessment*
- BGS, Geology of Britain Viewer, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>, (Accessed January 2018)
- CIFA (2014a) *Code of Conduct, Reading*
- CIFA (2014) *Standard and guidance for commissioning work or providing consultancy advice on archaeology and the historic environment, Reading*
- CIFA (2014b) (updated January 2017) *Standard and Guidance for Historic Environment Desk Based Assessments, Reading*
- CIFA (2014e) *Standard and guidance for the archaeological investigation and recording of standing buildings or structures*
- CIFA (2014c) *Standard and guidance for archaeological field evaluation*
- CIFA (2014d) *Standard and guidance for archaeological excavation*
- Department for Communities and Local Government (2018) *National Planning Policy Framework*
- Department for Transport (2014) *National Policy Statement for National Networks*
- Fylde Borough Council (2005) *Fylde Borough Local Plan (Adopted October 2005)*
- Fylde Council, (2018) *Fylde Local Plan to 2032* [Online] Available at: <http://www.fylde.gov.uk/council/planning-policy--local-plan-/local-development-framework/www-fylde-gov-uk-submission/> [last accessed August 2018].
- Highways England (2007) *Design Manual for Roads and Bridges, HA208/07 Volume 11 Section 3, Part 2: Cultural Heritage*
- Historic England (2008) *Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment*
- Historic England (2018) *Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment January 2018 Draft*
- Historic England (2017a) *Seeing the History in the View*
- Historic England (2017b) *The setting of Heritage Assets, Historic Environment Good Practice Advice in Planning Note 3 (second edition), London*

Historic England (2016) *Understanding Historic Buildings: A Guide to Good Recording Practice, (fifth edition)* London

Ministry of Housing, Communities and Local Government (2012) *National Planning Policy Framework*

Ministry of Housing, Communities and Local Government (2017) *National Planning Policy Guidance*

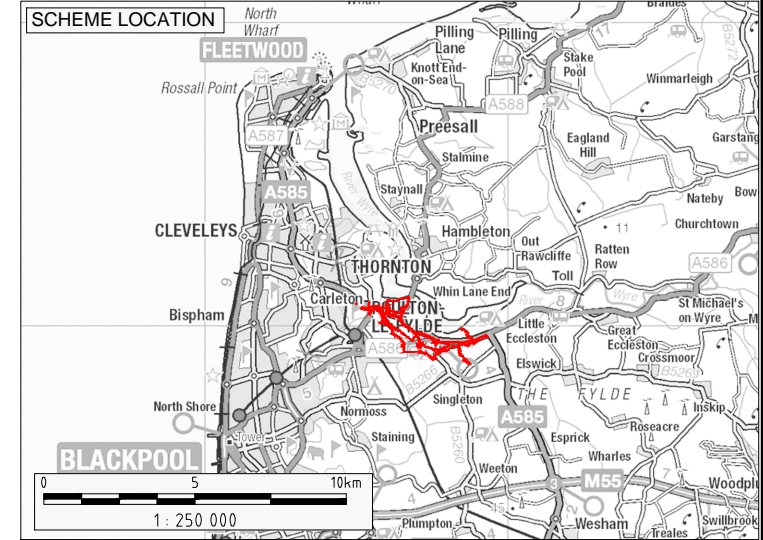
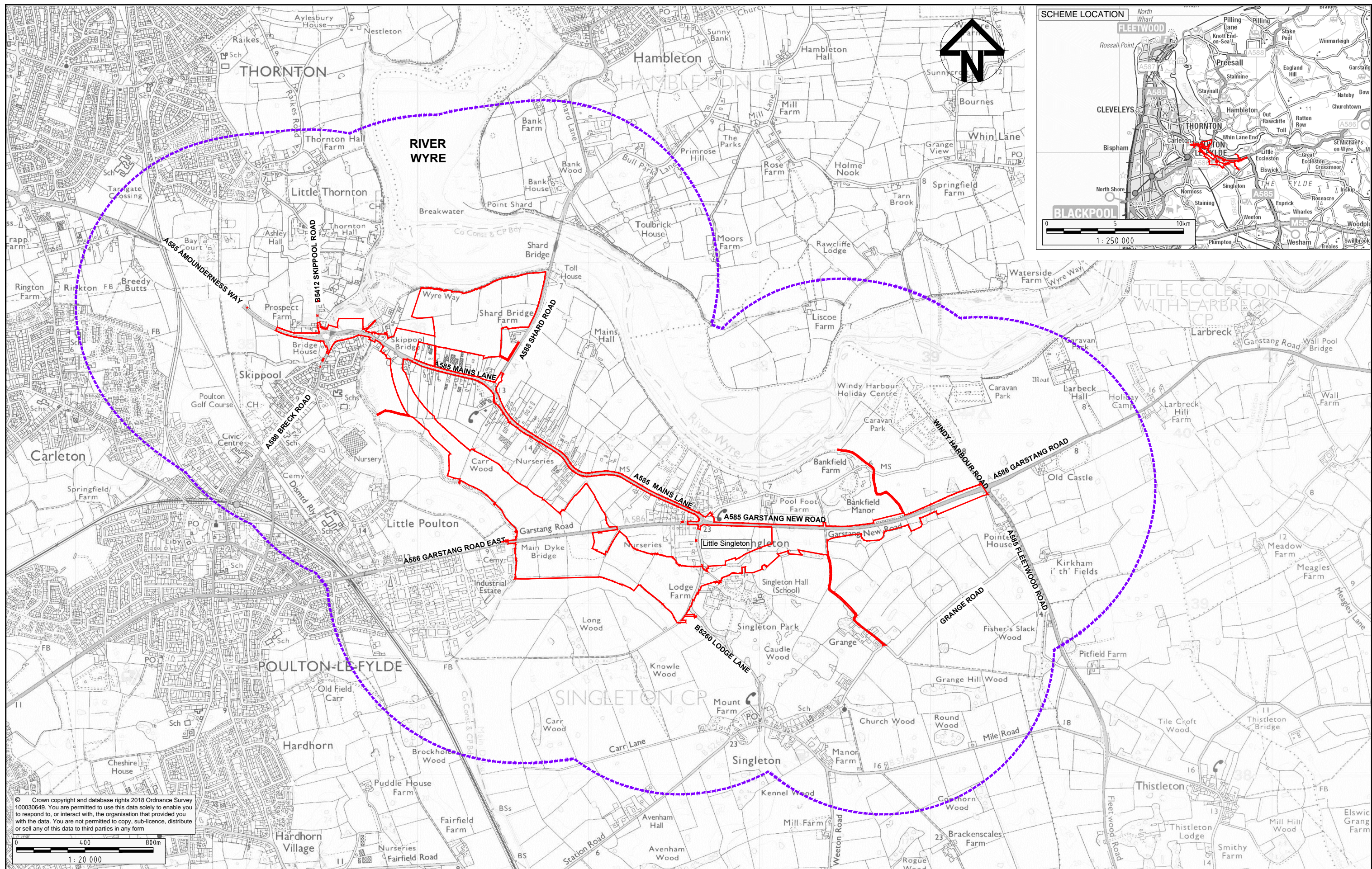
Planning (Listed Buildings and Conservation Areas) Act 1990

Visit Lancashire, 2018, "Singleton",
<https://www.visitlancashire.com/explore/singleton-p90300>, (Accessed March 2018)

Wyre Council (1999) *Wyre Adopted Local Plan (1991-2006)*

Wyre Council (2018) *Wyre Local Plan to 2031* [Online] Available at:
http://www.wyre.gov.uk/info/200319/wyres_emerging_new_local_plan (last accessed August 2018).

7.11 **Figures**



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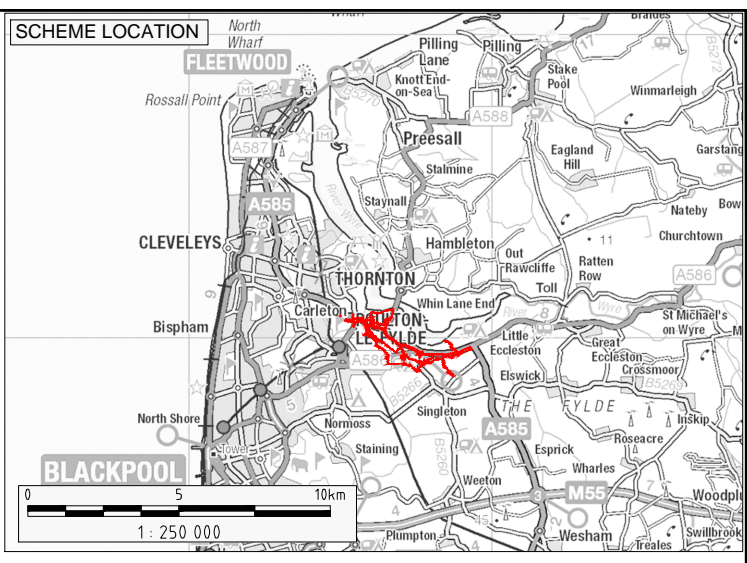
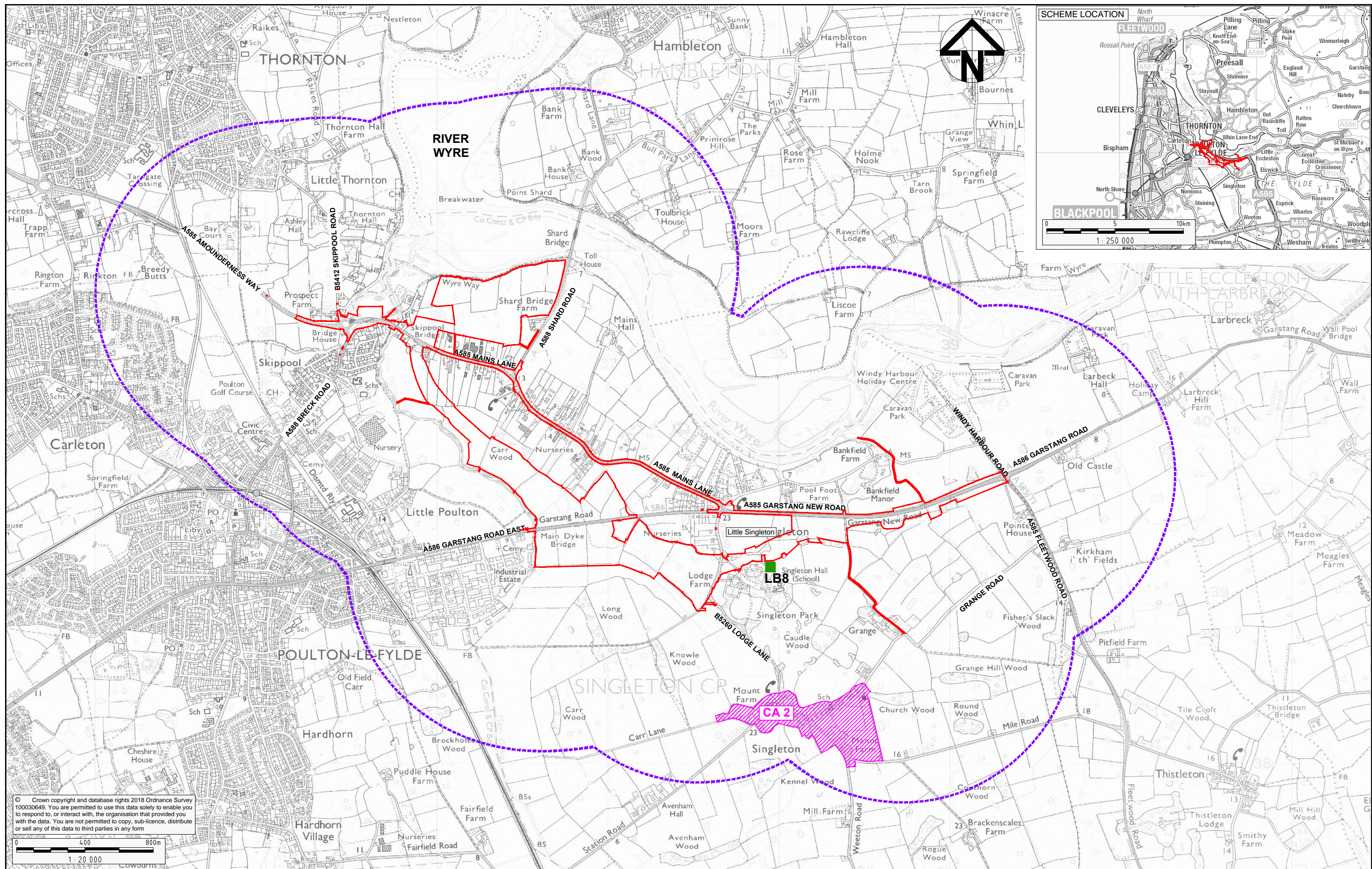
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 Draft Order Limits
 1km Study Area



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 Project A585 WINDY HARBOUR TO SKIPPOOL IMPROVEMENT SCHEME
 Drawing Title ENVIRONMENTAL STATEMENT REGULATION 5(2)(a) CULTURAL HERITAGE: LOCATION MAP

Status	S8 - DCO SUBMISSION	Revision	0
Scale	1:20 000 @ A3	Date	OCT 2018
Drawn By	J.NORMAN		
Checked By	K.BURROWS		
Approved By	N.HENDERSON		
PINS No.	TR010035	FIGURE	7.1
Drawing number	HE548643-A585-EAC-SZ_GN000-DR-L-3011		

0	S8	OCT18	S8 - DCO SUBMISSION	JN	KB	NH
Rev	Status	Rev. Date	Purpose of revision	Drawn	Checked	Approved



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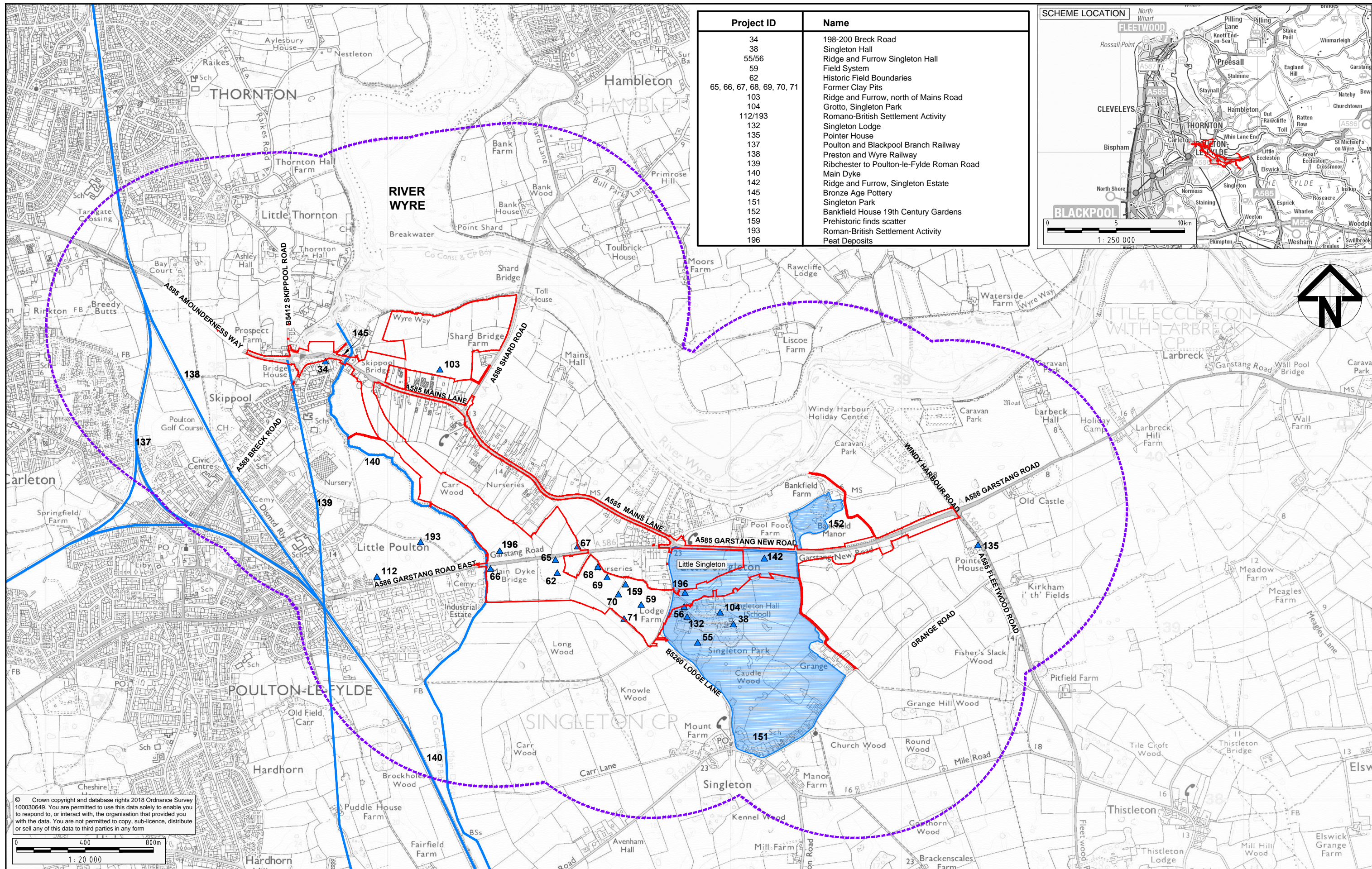
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	1km Study Area		Grade II Listed Building (Ice House at Singleton Hall)



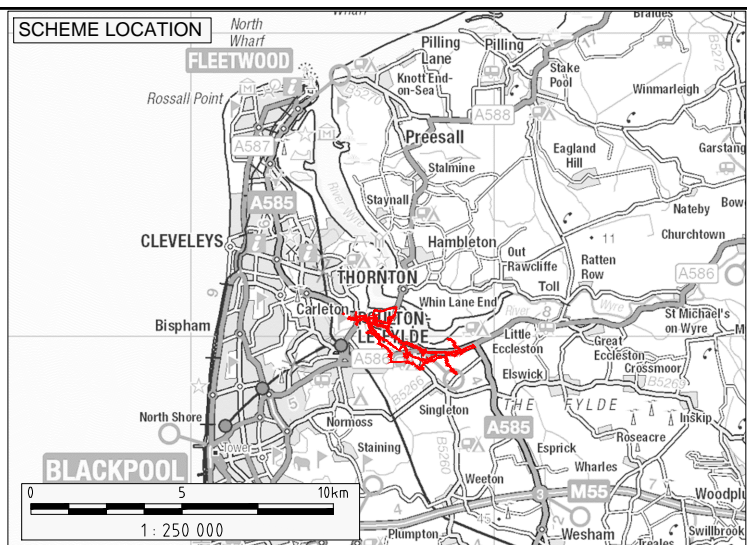
Client
Project A585 WINDY HARBOUR TO SKIPPOOL IMPROVEMENT SCHEME
Drawing Title ENVIRONMENTAL STATEMENT REGULATION 5(2)(a) CULTURAL HERITAGE: DESIGNATED HERITAGE RECEPTORS

Status	S8 - DCO SUBMISSION	Revision	0
Scale	1:20 000 @ A3	Date	OCT 2018
Drawn By	J.NORMAN		
Checked By	K.BURROWS		
Approved By	N.HENDERSON		
PINS No.	TR010035		FIGURE 7.2
Drawing number	HE548643-A585-EAC-SZ_GN000-DR-L-3012		

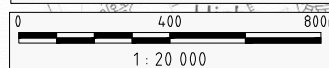
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Rev	Status	Rev. Date	Purpose of revision	Drawn	Checked	Approved



Project ID	Name
34	198-200 Breck Road
38	Singleton Hall
55/56	Ridge and Furrow Singleton Hall
59	Field System
62	Historic Field Boundaries
65, 66, 67, 68, 69, 70, 71	Former Clay Pits
103	Ridge and Furrow, north of Mains Road
104	Grotto, Singleton Park
112/193	Romano-British Settlement Activity
132	Singleton Lodge
135	Pointer House
137	Poulton and Blackpool Branch Railway
138	Preston and Wyre Railway
139	Ribchester to Poulton-le-Fylde Roman Road
140	Main Dyke
142	Ridge and Furrow, Singleton Estate
145	Bronze Age Pottery
151	Singleton Park
152	Bankfield House 19th Century Gardens
159	Prehistoric finds scatter
193	Roman-British Settlement Activity
196	Peat Deposits



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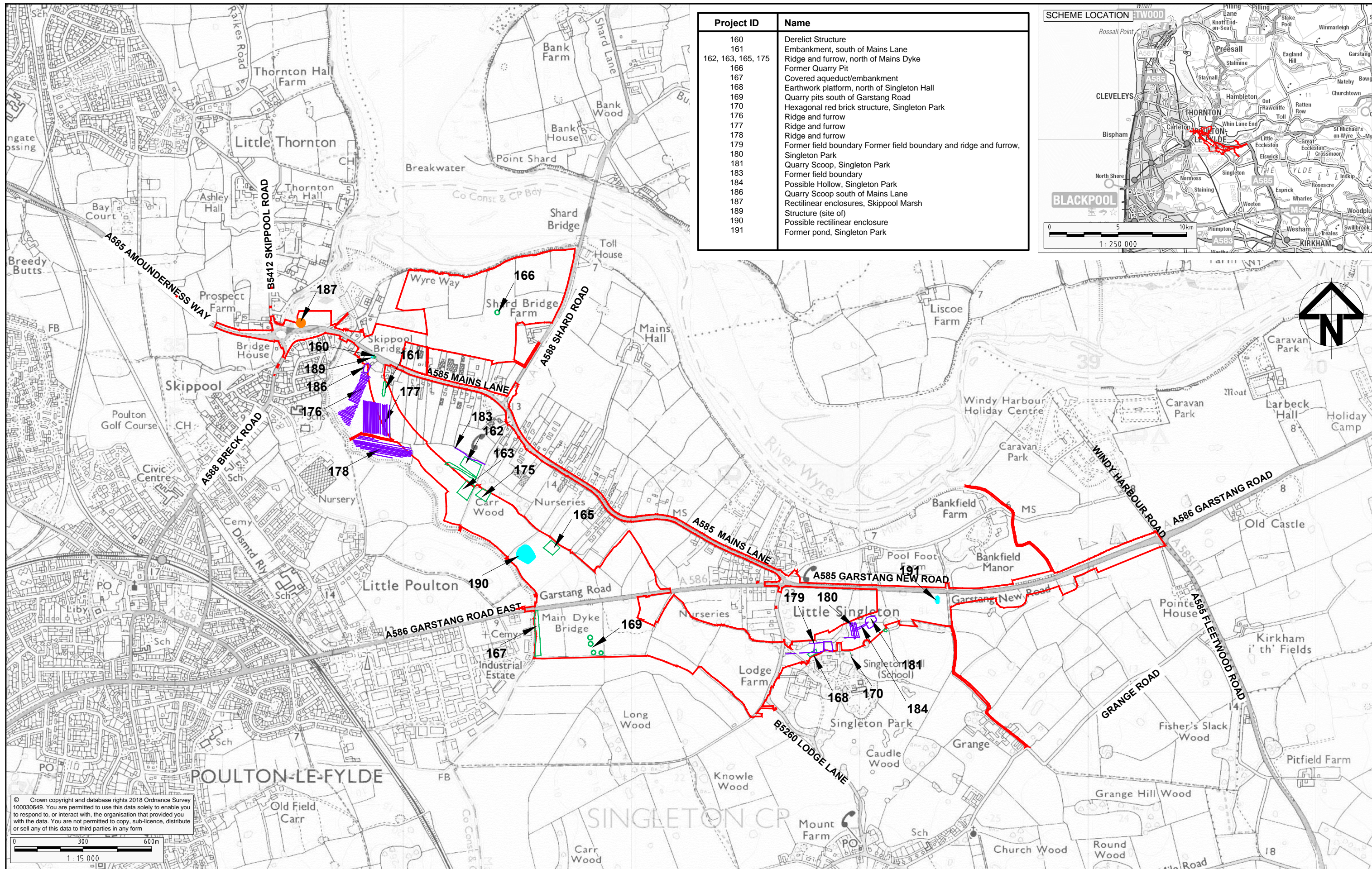


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	1km Study Area
	Non-Designated Linear Heritage Receptor
	Non-Designated Heritage Receptor Area
	Non-Designated Heritage Receptor

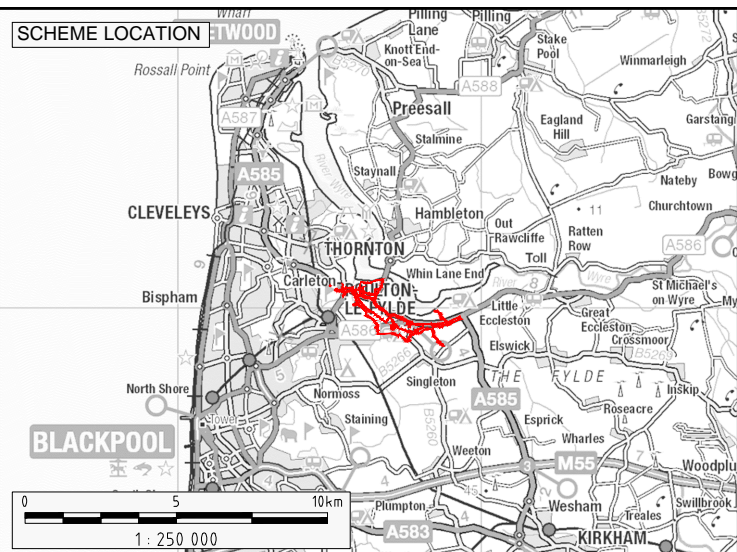


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Drawing Title	Revision	0
ENVIRONMENTAL STATEMENT REGULATION 5(2)(a) CULTURAL HERITAGE: NON DESIGNATED HERITAGE RECEPTORS	Date	OCT 2018
	Drawn By	J.NORMAN
	Checked By	K.BURROWS
	Approved By	N.HENDERSON
	PINS No.	TR010035
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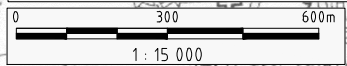
Rev	Status	Rev. Date	Purpose of revision	Drawn	Check'd	Apprv'd
0	S8	OCT18	S8 - DCO SUBMISSION	JN	KB	NH



Project ID	Name
160	Derelict Structure
161	Embankment, south of Mains Lane
162, 163, 165, 175	Ridge and furrow, north of Mains Dyke
166	Former Quarry Pit
167	Covered aqueduct/embankment
168	Earthwork platform, north of Singleton Hall
169	Quarry pits south of Garstang Road
170	Hexagonal red brick structure, Singleton Park
176	Ridge and furrow
177	Ridge and furrow
178	Ridge and furrow
179	Former field boundary Former field boundary and ridge and furrow,
180	Singleton Park
181	Quarry Scoop, Singleton Park
183	Former field boundary
184	Possible Hollow, Singleton Park
186	Quarry Scoop south of Mains Lane
187	Rectilinear enclosures, Skippool Marsh
189	Structure (site of)
190	Possible rectilinear enclosure
191	Former pond, Singleton Park



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KEY:

- Draft Order Limits
- Receptor identified through LiDAR
- Receptors identified through Walkover Survey
- Receptor identified through Historic Mapping
- Receptor identified through A.P. Analysis

Rev	Status	Rev. Date	Purpose of revision	Drawn	Check'd	Appr'd
0	S8	OCT18	S8 - DCO SUBMISSION	JN	KB	NH



Client
Project
A585 WINDY HARBOUR TO SKIPPOOL IMPROVEMENT SCHEME
Drawing Title
ENVIRONMENTAL STATEMENT REGULATION 5(2)(a) CULTURAL HERITAGE: HERITAGE RECEPTORS IDENTIFIED THROUGH LIDAR, HISTORIC MAPPING, AERIAL PHOTOGRAPHY AND WALKOVER SURVEY

Status	Revision
S8 - DCO SUBMISSION	0
Scale	Date
1:15 000 @ A3	OCT 2018
Drawn By	Checked By
J.NORMAN	K.BURROWS
Approved By	
N.HENDERSON	
PINS No.	FIGURE 7.4
TR010035	
HE548643-A585-EAC-SZ_GN000-DR-L-3014	